UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,636	08/06/2003	Kyra Moellmann	LASP:129US	1635

24041 7590 06/17/2005

SIMPSON & SIMPSON, PLLC
5555 MAIN STREET
WILLIAMSVILLE, NY 14221-5406

EXAMINER
WILLIAMS, DON J

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

Office Action Summary	Application No.	Applicant(s)	
	10/604,636	MOELLMANN, KYRA	
	Examiner	Art Unit	
	Don Williams	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08/06/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *06 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 8, is rejected under 35 U.S.C. 102(e) as being anticipated by Hoffman et al (US 2002/0104961 A1).

As to claim 8, Hoffman et al disclose a beam deflection device (15) for guiding an illuminating light beam (5) over a sample (25), a microscope optical system (23), a detector (41), a light source (1) which emits a combined light beam (5) and (9) that is generated by a first laser (3) and a second laser (7); and an optical combining means (29), (33), (19), and (21) which synchronizes the light of the first laser (3) with the light of the second laser (7), (see fig. 1, [0034], lines 1-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9,10,13, and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al in view of Simon et al (6,356,088).

As to claim 1, the modified Hoffman et al disclose a light source (1) for the illumination of microscopic specimens (25), comprising a first laser (3) and a second laser (7) wherein each of which emits light into a first beam path (5) and into a second beam path (9); an optical combining means (29), (33), (19), and (21) being introduced in the first (5) and the second (9) beam path. Hoffman et al fail to disclose a displaceable deflection unit. Simon et al disclose a displaceable deflection unit (38).

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include a displaceable deflection unit (38) as disclose by Simon et al to set a path length difference between the light of the first laser (32) and the second laser (42) to improve the image intensity level of specimen (5), (see fig. 4, column 5, lines 1-65).

As to claim 2, the modified Hoffman et al disclose the first laser (3) and the second laser (7) are short-pulse lasers that are passively synchronized with one another, (see fig. 1, paragraph [0034], lines 1-10).

As to claim 3, the modified Hoffman et al disclose a measurement unit (41) for ascertaining cross-correlation, which receives a portion of the light (5) of the first laser (3) and a portion of the light (9) of the second laser (7), and is used to ascertain a setting signal for adjusting the synchronization or controlled delay of the laser pulses of the first laser (3) and the second laser (7), (see fig. 1, [0036], lines 1-9).

As to claim 4, the modified Hoffman disclose the first laser (3) is a Ti:sapphire laser, (see fig. 1, paragraph [0034], lines 4-6).

As to claims 5 and 13, the modified Hoffman et al disclose a second laser (7). The modified Hoffman et al fail to disclose a Nd:YVO4 laser. Simon et al disclose different lasers.

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include a different laser as disclose by Simon et al to distinguish the light beams intensity strength and wave length difference along the optical beam path, (see fig. 4, column 5, lines 58-64).

As to claim 6, Hoffman et al disclose the first laser (3), the second laser (7), the diode laser (7), the optical combining means (29), (34), (19), (21), and (23) and the measurement unit (41). The modified Hoffman et al fail to disclose the displaceable deflection unit. Simon et al disclose the displaceable deflection unit (38).

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include the displaceable deflection unit (38) as disclose by Simon et al to acquire wavelength difference of the first laser (32) and the second laser (42) to improve highly compact microscope system by frequency conversion of the laser radiation, by means

of frequency doubling, frequency tripling, sum frequency generation, and difference frequency generation, (see fig. 4, column 3, lines 58-66).

As to claim 7, Hoffman et al disclose the module (43) is flange-mounted onto an optical examination apparatus (55) and (57) for microscope specimen (25), (see fig. 2, paragraph [0021], lines 1-6, and paragraph [0041], lines 1-6).

As to claims 9 and 10, the modified Hoffman et al disclose the first laser (3) defines a first beam path (5) and the second laser (7) define a second beam path (9); and the optical combining means (29), (33), (19), and (21) are introduced in the first beam path (5) and the second beam path (9). The modified Hoffman et al fail to disclose a displaceable deflection unit. Simon et al disclose a displaceable deflection unit (38) in the beam path of the first laser (3) or the second laser (7).

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include a displaceable deflection unit (38) as disclose by Simon et al for setting a path length difference between the light of the first laser (32) and the second laser (42) to improve the image intensity level of specimen (5), (see fig. 4, column 5, lines 1-65).

As to claim 11, Hoffman et al disclose a light source (1) is equipped with a measurement unit (41) for ascertaining cross-correlation which receives a portion of the light (9) of the second laser (7), and can be used to ascertain a setting signal for adjusting the synchronization or controlled delay of the laser pulses of the first laser (3) or the second laser (7), (see fig. 1, paragraph [0036], lines 1-9 [0038], lines 1-6).

As to claim 12, the modified Hoffman disclose the first laser (3) is a Ti:sapphire laser, (see fig. 1, paragraph [0034], lines 4-6).

As to claim 14, the modified Hoffman et al disclose the first laser (3), the second laser (7), the diode laser (7), the optical combining means (29), (33), (19), (21), and the measurement unit (41). The modified Hoffman et al fail to disclose a displaceable deflection unit. Simon et al disclose a displaceable deflection unit (38).

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include a displaceable deflection unit (38) as disclose by Simon et al to improve the image intensity level of specimen (5), (see fig. 4, column 5, lines 1-65).

Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al in view of Simon et al as applied to claim 15 above, and further in view of Engelhardt et al (6,608,295).

As to claim 15, the modified Hoffman et al disclose a module (43). The modified Hoffman et al fail to disclose a computer and a display. Engelhardt et al disclose a computer (33) and a display (27).

It would have been obvious for one ordinary skill in the art to modify Hoffman et al to include a computer (33) and a display (27) to acquire the correction values from a memory and forward the data to the control and processing unit (23) to form an image (35) which is displayed on the display (27), (see fig. 1, column 4, lines 64-67, column 5, lines 1-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don Williams whose telephone number is 571-272-8538. The examiner can normally be reached on 8:30a.m. to 5:30a.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephone B. Allen
Primary Examiner

Don Williams
Paten Examiner
Art Unit 2878
Ph: 571-272-8538